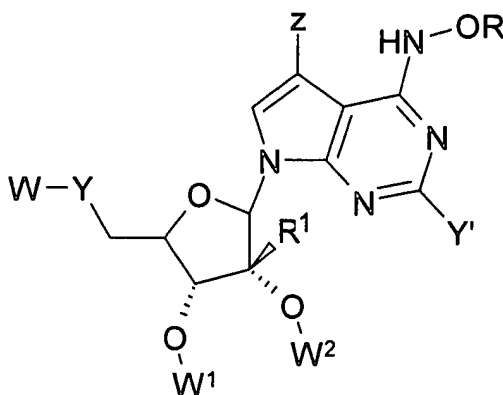


WHAT IS CLAIMED IS:

1. A compound of Formula I below:



II

wherein:

W, W<sup>1</sup> and W<sup>2</sup> are independently selected from the group consisting of hydrogen and a pharmaceutically acceptable prodrug;

10 R is selected from the group consisting of hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl;

R<sup>1</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl and substituted alkynyl;

Y is a bond, -CH<sub>2</sub>- or -O-;

15 Y' is selected from the group consisting of hydrogen, halo, hydroxyl, thioalkyl, amino and substituted amino;

Z is selected from the group consisting of acyl, cyano, carboxyl, carboxyl ester, -C(O)NR<sup>20</sup>R<sup>21</sup>, halo, -B(OH)<sub>2</sub>, -C(=NR<sup>2</sup>)R<sup>3</sup>, nitro, alkenyl, substituted alkenyl, acetylenyl and substituted acetylenyl of the formula -C≡C-R<sup>4</sup>;

20 where R<sup>2</sup> is selected from the group consisting of hydrogen, -OH, -OR<sup>5</sup> amino, substituted amino, and (C<sub>1</sub>-C<sub>2</sub>)alkyl, where R<sup>5</sup> is selected from the group consisting of alkyl and substituted alkyl;

R<sup>3</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, amino and substituted amino;

R<sup>4</sup> is selected from the group consisting of hydrogen, phenyl, substituted phenyl, heteroaryl, substituted heteroaryl, -Si(R<sup>8</sup>)<sub>3</sub>, carboxyl, carboxyl esters, and -C(O)NR<sup>6</sup>R<sup>7</sup> where R<sup>6</sup> and R<sup>7</sup> are independently hydrogen, alkyl or R<sup>6</sup> and R<sup>7</sup> together with the nitrogen atom pendent thereto are joined to form a heterocyclic, substituted heterocyclic, heteroaryl or substituted heteroaryl group;  
5 each R<sup>8</sup> is independently (C<sub>1</sub>-C<sub>4</sub>)alkyl or phenyl; and  
R<sup>20</sup> and R<sup>21</sup> are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclic and substituted heterocyclic or R<sup>20</sup> and R<sup>21</sup>, together with the nitrogen atom pendent thereto form a heterocyclic or  
10 substituted heterocyclic group;  
or pharmaceutically acceptable salts thereof.

2. A compound of Claim 1 wherein, W is selected from the group consisting of hydrogen, monophosphate, diphosphate, and triphosphate.

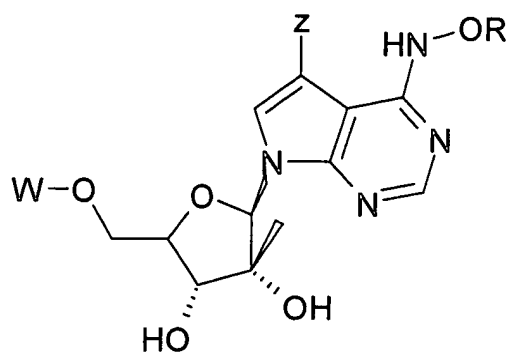
15

3. A compound of Claim 1 wherein, W<sup>1</sup> and W<sup>2</sup> are independently hydrogen or acyl.

4. A compound of Claim 3, wherein one of W<sup>1</sup> and W<sup>2</sup> is an acyl group selected from the group consisting of acetyl, trimethylacetyl, and acyl groups derived from amino acids.

20

5. A compound of Formula II



II

wherein:

W is selected from the group consisting of hydrogen and a pharmaceutically  
5 acceptable prodrug;

R is selected from the group consisting of hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl;

Z is selected from the group consisting of acyl, cyano, carboxyl, carboxyl ester, -  
C(O)NR<sup>20</sup>R<sup>21</sup>, halo, -B(OH)<sub>2</sub>, -C(=NR<sup>2</sup>)R<sup>3</sup>, nitro, alkenyl, substituted alkenyl, acetylenyl  
and substituted acetylenyl of the formula -C≡C-R<sup>4</sup>;

10 where R<sup>2</sup> is selected from the group consisting of hydrogen, -OH, -OR<sup>5</sup> amino,  
substituted amino, and (C<sub>1</sub>-C<sub>2</sub>)alkyl, where R<sup>5</sup> is selected from the group consisting of  
alkyl and substituted alkyl;

R<sup>3</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl,  
amino and substituted amino;

15 R<sup>4</sup> is selected from the group consisting of hydrogen, phenyl, substituted phenyl,  
heteroaryl, substituted heteroaryl, -Si(R<sup>8</sup>)<sub>3</sub>, carboxyl, carboxyl esters, and -C(O)NR<sup>6</sup>R<sup>7</sup>  
where R<sup>6</sup> and R<sup>7</sup> are independently hydrogen, alkyl or R<sup>6</sup> and R<sup>7</sup> together with the  
nitrogen atom pendent thereto are joined to form a heterocyclic, substituted heterocyclic,  
heteroaryl or substituted heteroaryl group;

20 each R<sup>8</sup> is independently (C<sub>1</sub>-C<sub>4</sub>)alkyl or phenyl; and

R<sup>20</sup> and R<sup>21</sup> are independently hydrogen, alkyl, substituted alkyl, aryl, substituted  
aryl, heteroaryl, substituted heteroaryl, heterocyclic and substituted heterocyclic or R<sup>20</sup>  
and R<sup>21</sup>, together with the nitrogen atom pendent thereto form a heterocyclic or  
substituted heterocyclic group;

or pharmaceutically acceptable salts thereof.

6. A compound of claim 5 wherein, W is selected from the group consisting of hydrogen, monophosphate, diphosphate, and triphosphate.

5

7. A compound of Claim 1 or Claim 5, wherein, Z is selected from the group consisting of acyl, nitro, halo, cyano,  $-C(=NR^2)R^3$ , acetylenyl and substituted acetylenyl of the formula  $-C\equiv C-R^4$  where  $R^2$ ,  $R^3$  and  $R^4$  are as defined above.

10 8. A compound of Claim 7 wherein, Z is selected from formyl, nitro, bromo, iodo, and  $-C\equiv C-R^4$  and  $R^4$  is selected from H, phenyl, and  $-\text{Si}(\text{CH}_3)_3$ .

9. A compound selected from the group consisting of:

15 1-(6-hydroxylamino-7-ethynyl-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (1);

1-(6-hydroxylamino-7-(2-phenylethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (2);

1-(6-hydroxylamino-7-(2-(pyridin-2-yl)-ethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (3);

20 1-(6-hydroxylamino-7-(2-(4-fluorophenyl)ethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (4);

1-(6-hydroxylamino-7-(2-(4-methylphenyl)ethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (5);

25 1-(6-hydroxylamino-7-(2-carboxylethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (6);

1-(6-hydroxylamino-7-(2-ethyl carboxylethyn-1-yl)-7-deazapurin-9-yl)-2-methyl- $\beta$ -D-ribofuranose (7);

1-(6-hydroxylamino-7-(2-carboxamidoethyn-1-yl)-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (8);

1-(6-hydroxylamino-7-(2-trimethylsilylethyn-1-yl)-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (9);

5            1-(6-hydroxylamino-7-ethenyl-7-deaza- purin-9-yl)-2-methyl-β-D-ribofuranose (10);

1-(6-hydroxylamino-7-formyl-7-deaza-purin-9-yl)-2-methyl-β-D-ribofuranose (11);

10           1-(6-hydroxylamino-7-(carbaldehyde oxime))-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (12);

1-(6-hydroxylamino-7-(boronic acid)-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (13);

1-(6-hydroxylamino-7-(2,2-difluorovinyl)-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (14);

15           1-(6-hydroxylamino-7-(2-*cis*-methoxyvinyl)-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (15);

1-(6-hydroxylamino-7-nitro-7-deaza-purin-9-yl)-2-methyl-β-D-ribofuranose (16);

20           1-(6-hydroxylamino-7-cyano-7-deaza- purin-9-yl)-2-methyl-β-D-ribofuranose (17);

1-(6-methoxyamino-7-ethynyl-7-deazapurin-9-yl)-2-methyl-β-D-ribofuranose (18);

1-(6-methoxyamino-7-nitro-7-deaza- purin-9-yl)-2-methyl-β-D-ribofuranose (19);

25           1-(6-methoxyamino-7-formyl-7-deaza- purin-9-yl)-2-methyl-β-D-ribofuranose (20);

and pharmaceutically acceptable salts thereof.

10. A pharmaceutical compositions comprising a pharmaceutically acceptable diluent and a therapeutically effective amount of a compound of any one of Claims 1, 5 and 9.

5

11. A method for treating a viral infection mediated at least in part by a virus in the *flaviviridae* family of viruses in mammals which methods comprise administering to a mammal, that has been diagnosed with said viral infection or is at risk of developing said viral infection, a pharmaceutical composition comprising a pharmaceutically acceptable diluent and a therapeutically effective amount of a compound of any one of Claims 1, 5 and 9.

10

12. The method of Claim 11, wherein said virus is HCV.